



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,652	09/04/2003	David L. Chalupsky	P14969 8297	
59796 INTEL CORPO	7590 05/07/2007 ORATION		EXAMINĖR	
c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			WHIPPLE, BRIAN P	
			ART UNIT	PAPER NUMBER
			2152	-
		- 00	MAIL DATE	DELIVERY MODE
			05/07/2007	DADED

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/656,652	CHALUPSKY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian P. Whipple	2152				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (8) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on 04 Se	eptember 2003					
2a) ☐ This action is FINAL . 2b) ☒ This	This action is FINAL . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims		• .				
4) ⊠ Claim(s) 1-52 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-52 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers	•					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO.413)				
 Notice of References Cited (PTO-692) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/17/04 and 10/11/05. 	Paper No(s)/Mail Da 5) Notice of Informal Pa	nte				

DETAILED ACTION

1. Claims 1-52 are pending in this application and presented for examination.

2. The preliminary amendment received on 10/11/05 has been entered and made of record.

Claim Objections

3. As to claims 1, 14, and 48, a claim preamble should set forth at least an environment or objective. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 7, 18, 23, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 6. As to claim 7, it is stated that "the operation to change the transmission speed comprises an operation to either increase the transmission speed if the local network device is capable of transmitting at a transmission speed that is higher than the current transmission speed or decrease the transmission speed if the local network device is

Art Unit: 2152

capable of transmitting at a transmission speed that is lower than the current transmission speed."

If the local network device is capable of transmitting at both a higher or lower transmission speed than the current transmission speed (e.g. the current transmission speed is 100 Mb/s and the local network device supports 10 Mb/s and 1 Gb/s), the result (i.e. if the transmission speed will go lower or higher) is unclear.

- 7. As to claims 18 and 29, the claim is rejected for the same reasons as claim 7 above.
- 8. As to claim 23, the phrase "the current transmission speed" lacks antecedent basis.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. As to claim 23, the instant specification describes the article of manufacture as including non-statutory embodiments such as "signals propagating through space, radio waves, infrared signals, etc." ([0024]). Signals and waves fail to fall into the four statutory classes of invention: manufacture, machine, process, or composition of matter.

Art Unit: 2152

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 12. Claims 1-2, 4-12, 14-19, 21-24, 26-34, 36, 38-39, 41-42, 44-45, and 47-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Robert et al. (Robert), U.S. Publication No. 2004/0003296 A1.
- 13. As to claim 1, Robert discloses a method comprising: selectively determining a new transmission speed different from a current transmission speed between a local network device and a linked network device in response to a speed change event ([0019], In. 1-7; [0020], In. 1-12); and

transmitting a speed change request and the new transmission speed to the linked network device to request the local and linked network devices to communicate at the new transmission speed, wherein the transmitting occurs while maintaining a linked exchange between the local and linked network devices ([0023], In. 1-3; [0024] – [0025]).

Art Unit: 2152

- 14. As to claim 2, Robert discloses transmitting the speed change request comprises including the speed change request and the new transmission speed in a data packet being transmitted to the linked network device at the current transmission speed ([0023], In. 1-3; [0024] [0025]; [0026], In. 1-5).
- 15. As to claim 4, Robert discloses the linked network device in response to the speed change request returns positive acknowledgment to the local network device if the linked network device is capable of transmitting at the new transmission speed ([0024] [0026]).
- 16. As to claim 5, Robert discloses the local and linked network devices continue to transmit data at the current transmission speed until the linked network device returns a positive acknowledgment ([0023]).
- 17. As to claim 6, Robert discloses the linked network device in response to the speed change request returns negative acknowledgment to the local network device if the linked network device is not capable of transmitting at the new transmission speed ([0023]).
- 18. As to claim 7, Robert discloses the operation to change the transmission speed comprises an operation to either increase the transmission speed if the local network device is capable of transmitting at a transmission speed that is higher than the current

Art Unit: 2152

transmission speed or decrease the transmission speed if the local network device is capable of transmitting at a transmission speed that is lower than the current transmission speed ([0023] – [0027]).

- 19. As to claim 8, Robert discloses maintaining transmission information indicating transmission capabilities of the linked network device, wherein the determined new transmission speed is a new transmission speed that the transmission information indicates that the linked network device is capable of performing ([0023])
- 20. As to claim 9, Robert discloses setting a register in the local network device to indicate the new transmission speed, wherein a device driver used to communicate with the local network device determines the new transmission speed, wherein setting the register in the local network device comprises the device driver changing advertised capabilities of the local network device indicated in the register, and wherein transmitting the speed change request comprises restarting an auto-negotiation process that selects a common transmission speed based on the changed advertised capabilities in the local network device (Fig. 1-2; [0023] [0026]).
- 21. As to claim 10, Robert discloses the determined new transmission speed is higher than the current transmission speed, and wherein changing the advertised capabilities comprises removing any transmission speeds indicated in the advertised capabilities of the local network device that are less than the determined new transmission speed (Fig. 1-2; [0023] [0027]).

Art Unit: 2152

- 22. As to claim 11, Robert discloses the determined new transmission speed is lower than the current transmission speed, and wherein changing the advertised capabilities comprises removing any transmission speeds indicated in the advertised capabilities of the local network device that are higher than the determined new transmission speed (Fig. 1-2; [0023] [0027]).
- 23. As to claim 12, Robert discloses the speed change event comprises an application program determining an anticipated increase of data transmission through the local network device, and wherein the new transmission speed is higher than the current transmission speed ([0027]).
- 24. As to claims 14, 23, and 48, the claims are rejected for the same reasons as claim 1 above.
- 25. As to claims 15 and 26, the claims are rejected for the same reasons as claim 4 above.
- 26. As to claims 16 and 27, the claims are rejected for the same reasons as claim 5 above.
- 27. As to claims 17 and 28, the claims are rejected for the same reasons as claim 6 above.

- 28. As to claims 18 and 29, the claims are rejected for the same reasons as claim 7 above.
- 29. As to claims 19 and 30, the claims are rejected for the same reasons as claim 8 above.
- 30. As to claim 21, the claim is rejected for the same reasons as claim 1 above. Additionally, Robert discloses a workstation system ([0017] [0018]).
- 31. As to claims 22 and 31, the claims are rejected for the same reasons as claim 9 above.
- 32. As to claim 24, the claim is rejected for the same reasons as claim 2 above.
- 33. As to claim 32, the claim is rejected for the same reasons as claim 10 above.
- 34. As to claim 33, the claim is rejected for the same reasons as claim 11 above.
- 35. As to claim 34, the claim is rejected for the same reasons as claim 12 above.

Application/Control Number: 10/656,652 Page 9

Art Unit: 2152

36. As to claim 36, Robert discloses the speed change event is based on a change in desired power consumption ([0006]; [0008]; [0011]).

- 37. As to claims 38, 41, 44, 47, and 49-50, the claims are rejected for the same reasons as claim 5 above.
- 38. As to claims 39, 42, 45, and 51, the claims are rejected for the same reasons as claim 36 above.

Claim Rejections - 35 USC § 103

- 39. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 40. Claims 3, 13, 20, 25, 35, 37, 40, 43, 46, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert as applied to claims 1, 14, 21, 23, and 48 above, in view of Murase et al. (Murase), U.S. Patent No. 6,298,042 B1.
- 41. As to claim 3, Robert discloses the invention substantially as in parent claim 1, including transmitting the speed change request comprises including the speed change

Art Unit: 2152

request and the new transmission speed in a data packet at the current transmission speed ([0023], In. 1-3; [0024] – [0025]; [0026], In. 1-5).

Robert is silent on the packet being a preamble packet that is transmitted at the beginning of data packets or, alternatively, an idle transmission between packets to synchronize data transmissions.

However, Murase discloses an idle transmission between packets to synchronize data transmissions (Col. 3, In. 64 – Col. 4, In. 21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Robert by using an idle transmission to synchronize data transmissions as taught by Murase in order to prevent the network from being suddenly applied with a high load without any rapid change of the actual transmission rate to a high value (Murase: Col. 3, In. 45-47).

42. As to claim 13, Robert discloses the invention substantially as in parent claim 1, but is silent on the speed change event is based on a detected change in network traffic at the local network device.

However, Murase discloses the speed change event is based on a detected change in network traffic at the local network device (Col. 3, In. 64 – Col. 4, In. 21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Robert by detecting a change in network traffic to change speed as taught by Murase in order to prevent the network from being suddenly

Application/Control Number: 10/656,652 Page 11

Art Unit: 2152

applied with a high load without any rapid change of the actual transmission rate to a high value (Murase: Col. 3, In. 45-47).

- 43. As to claims 20, 35, 37, 40, 43, 46, and 52, the claims are rejected for the same reasons as claim 13 above.
- 44. As to claim 25, the claim is rejected for the same reasons as claim 3 above.

Conclusion

- 45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached Notice of References Cited (PTO-892).
- 46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571) 270-1244. The examiner can normally be reached on Mon-Fri (8:30 AM to 5:00 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian P. Whipple 4/30/07

BUNJOB JAROENCHONWANIT SUPERVISORY PATENT EXAMINER